Indiana Department of Natural Resources
Division of Reclamation

Regulatory and Abandoned Mine Lands Programs
Annual Evaluation Report
EY 2002

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Office of Surface Mining
Indianapolis Field Office

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Cover Page is a collection of photos of the AML Award winning Sunshine Mine project

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of, and provide Federal funding for, State regulatory programs approved by OSM as meeting the standards specified in SMCRA. This report contains summary information regarding the Indiana program and its effectiveness in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of October 1, 2001, to September 30, 2002. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Indianapolis Field Office (IFO) of the OSM.

The following acronyms appear in this report:

ACSI……Appalachian Clean Streams Initiative
AMD.....…. Acid Mine Drainage
AML……Abandoned Mine Land
AOC.....….. Approximate Original Contour
ATP…….Authorization to Proceed
AVS……Applicant Violator System
CoE…….Corps of Engineers
EY ..... Evaluation Year
GIS……. Geographical Information System
IDOR..... Indiana Department of Natural Resources, Division of Reclamation
IFO..... Indianapolis Field Office of the OSM
IGS……..Indiana Geological Survey
MCRCC……. Mid-Continent Regional Coordinating Center
NOV……Notice-of-Violation
OSM.....…U. S. Department of the Interior, Office of Surface Mining
PAD…….Problem Area Description
PSFWSC…… Patoka South Fork Watershed Steering Committee
RC&D…….Resource Conservation and Development Area
SMCRA..... Surface Mining Control and Reclamation Act of 1977, PL 95-87

II. Overview of the Indiana Coal Mining Industry

Coal Resources:

In Indiana, the coal field covers about 6,500 square miles in southwestern Indiana, and is the eastern edge of the Illinois Coal Basin. Indiana coal seams dip about 25 feet per mile to the west toward the center of the Illinois Coal Basin. All Indiana coal is bituminous, highly volatile, and is characterized as follows:

Index map of Indiana showing the coal-bearing rocks of the Pennsylvanian System in green, underground coal mines in blue, and surface coal mines in brown.

Indiana Coal Values

Value	*High*	*Low*
Moisture Content	15%	5%
Heating Value In BTU	12,000	10,500
Ash Content	20%	5%
Sulphur Content	6%	0.5%

Bituminous coal was first discovered in Indiana along the Wabash River in 1736, and was reported in land surveys and its location marked on maps by 1804. Small-scale surface mining along exposed coal seams was done at first by pick and shovel and later by horse and scraper. The first underground mine shaft in Indiana was developed in 1850 at Newburgh, Indiana, and by 1852 both shaft and slope mines had became common. In 1840 production was around 9,700 tons, and by 1918 at the close of World War I, production in Indiana had reached over 30,000,000 tons per year. With the advent of steam-powered equipment, surface mining began on a large scale and has since that time remained a strong and viable industry.

M*ethods of Mining:*

While in recent years, Indiana coal has come primarily from surface mines, underground mining was once the major method of coal extraction in the state. Because a large portion of the surface reserves has already been removed, surface mining activities should decline. It is probable that the decline in surface mining will be accompanied by a resurgence of underground mining.

Indiana has an approximate 34 billion ton coal reserve, with around 18 billion tons recoverable using current technology. Of the recoverable coal, about 16 billion tons can be extracted through underground mining and 2 billion tons through surface mining.

Use of Indiana Coal:

Most of Indiana's coal is used by the electric utility industry which burns a combination of Indiana and lower sulphur out-of-state coal to meet the current air pollution emission requirements.

III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

The *Indiana Prime Farmland Team* consists of representatives from the Natural Resources Conservation Service, the Daviess County Soil and Water Conservation District, the Sullivan County and Purdue University Cooperative Extension Service, the Indiana Farm Bureau, the Indiana Division of Reclamation (IDOR), an Indiana Coal Company, the Sierra Club, a private consultant, and the OSM. This team meets periodically to address prime farmland issues.

During evaluation year (EY) 2002, the *Patoka South Fork Watershed Steering Committee*, a group formed under the Appalachian Clean Streams Initiative, (ACSI), met periodically to develop and implement projects to improve the Patoka River South Fork Watershed. Past coal mining activities, oil and gas operations, and agricultural practices have had a strong negative impact on this watershed. Both OSM and IDOR are represented on this committee.

The Indiana Coal Council is the primary representative of the coal industry in the State, while the environmental community is primarily represented by the Hoosier Environmental Council. The IFO maintains as needed contacts with these organizations, their members, and citizens throughout the evaluation year.

During EY 2002 IFO professional staff presented facts about coal mining in Indiana to four classes at an elementary school. Information about coal formation, mining, uses, and reclamation were discussed.

The IDOR successfully implements the required public participation provisions of all aspects of its regulatory and abandoned mine land (AML) programs. In addition to addressing the required provisions of public participation, Indiana has taken a pro-active position regarding outreach and the distribution of information to all stakeholders. Under its "Operation Excellence" Program, Indiana established a goal "To create a greater public awareness of, and appreciation for Division programs through the use of various written, audio, and visual media."

The following informational publications are present on the IDOR web site as well as through phone or mail and personal contact:

Citizen's Guide to Indiana's Abandoned Mine Land Program,
Citizen's Guide to Coal Mining and Reclamation in Indiana,
Division of Reclamation Annual Report, and
Division of Reclamation Strategic Plan.

The IDOR site also provides abundant information about the mission of the agency, the programs administered by the agency, and tools and publications available to the public.

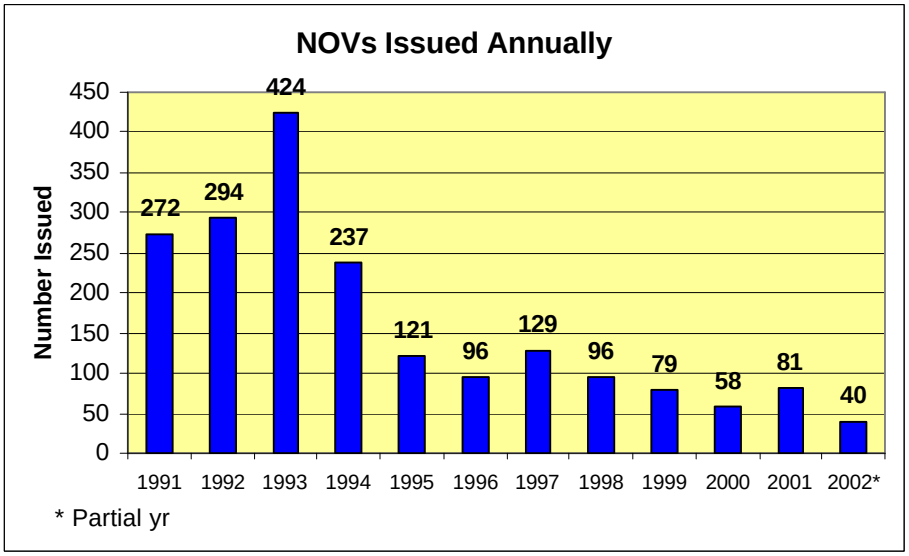
Indiana continues to be pro-active in meeting controversial situations head on. It routinely conducts meetings and gathers public input when significant questions arise about a program area under its jurisdiction.

All of this is part of an overall strategy by the State directed toward better citizen understanding and involvement in the Regulatory and Abandoned Mine Land Programs.

IV. Major Accomplishments/Issues/Innovations in the Indiana Program

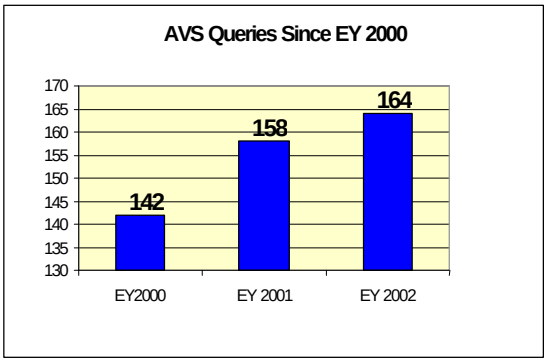
Indiana maintained its Regulatory Program to assure that the approved program remains effective in providing protection from the adverse effects of surface coal mining operations. Indiana also maintains a cooperative agreement with OSM to administer the State program requirements on federally owned land. Indiana has proposed several amendments to assure that its program remains timely and as effective as the Federal requirements.

Indiana administers its program in a way that effectively protects citizens and the environment from adverse impacts resulting from surface coal mining activities. Since 1991, environmental compliance by coal mining operators has significantly improved as can be seen in the decrease of Notice-of-Violations (NOV) issued from 1991 to 2002. The table below graphically demonstrates this compliance increase.



Applicant Violator System (AVS):

During the reporting period the IDOR complied with provisions of the April 1, 1991, Memorandum of Understanding with OSM and continues to comply with provisions requiring AVS checks of contractors for Abandoned Mine Lands. Indiana continues to update ownership/control information on a timely basis.



Clean Stream Activities

Indiana continues to be an active participant in the ACSI. Historically, the IDOR has dealt primarily with two organizations that address clean streams projects. The southern portion of the Indiana coal field is represented by the Four Rivers Resource Conservation and Development Area (RC&D) and the northern portion of the Indiana coal field is represented by the Sycamore Trails RC&D. In EY 2002, there were three active ACSI projects located within the South Fork of the Patoka River watershed.

OSM has funded $569,696 for these three projects, which represents approximately 52 percent of the total cost of $1,104,594. There were an average of 11 partners/participants, which contributed the remaining share of the project's cost.

National Abandoned Mine Land Reclamation Awards

Each year the OSM honors the best examples of abandoned mine land reclamation. For 2002, the IDOR/AML Branch was selected as the National Award winner for its restoration of the Sunshine Mine Reclamation Project in Bicknell, Indiana. In announcing the award winner, Secretary Norton recognized the IDOR as a leader in the field of mine reclamation that set the standards of excellence for the future, and help preserve and enhance the quality of American life.

The Sunshine Mine is located in Knox County, Indiana in the northwest corner of the city of Bicknell. It was an underground shaft mine, which began operation in 1936 and continued until 1959. Approximately 2.8 million tons of coal were removed during the life of the mine.

Photo No. 1
Aerial view of pre-reclamation site conditions.

The east side of the Sunshine Mine site adjoins the Knox County Fairgrounds, which seasonally hosts the county fair and other community and countywide activities. The site is bounded on the west by Indian Creek, a small tributary of the White River (West Fork). Agricultural farmland is located to the north of this old mine.

The processing operations associated with the Sunshine Mine left behind a 25-acre area of gob, slurry, abandoned and derelict buildings, trash and other debris. Prior to reclamation, this site was a detriment to the community of Bicknell. Past gob fires and abandoned buildings created health and safety problems. The environment was being negatively impacted not only by the gob fires but by acid mine drainage and off site sedimentation into Indian Creek. The site was a liability to the community both aesthetically and economically.

Indian Creek receives all of the drainage from this AML site. Since the mine was abandoned in 1959, the creek has been negatively impacted by the presence of the coal refuse. Chemical degradation included the acid mine drainage derived from the pyritic coal refuse, the associated precipitation of heavy metals in the stream, and heavy loads of sediment from the barren, loose coal refuse material.

Reclamation consisted of demolition and disposal of buildings, excavation and burial of coal refuse, covering of the graded construction area with excavated borrow material, installing erosion control features, and revegetation of all disturbed areas. Eliminated were the dangers associated with the buildings and the health and safety problems of past gob fires. Infiltration of precipitation into the gob has been reduced and drainage is directed away from the site more quickly and efficiently, thus reducing acid mine drainage and off site sedimentation. The aesthetics have been greatly improved and the site now has potential for productive use.

Photo No. 4
The northeast corner of the borrow/refuse disposal area with the Knox County Fairgrounds in the background.

Indiana AML Award Winners

1992	Booneville Hospital Ramp
2000	Midwestern Reclamation Project
2002	Sunshine Mine

Active Mining Reclamation Awards

The Indiana Program has consistently been one that has encouraged operators to mine and reclaim responsibly. The positive interaction between the regulators and the industry is evident by the number of OSM Reclamation Awards that Indiana has received over the years.

During EY 2002, the OSM presented awards for the most outstanding examples of coal mine reclamation accomplished since SMCRA was enacted in 1977. Solar Sources,

Inc.'s Sky-Point Mine, located near Lynnville, Indiana was recognized as the very best example of reclamation in the United States over the past 25 years for its exemplary soil replacement and for restoring the site to farmland. From 1984 until 1999, the Sky-Point Mine affected over 1,300 acres of land, which encompassed numerous land uses. During the life of this minesite, the operator successfully conducted mining and reclamation activities close to several residences and a major State highway. They typically constructed terraces during reclamation of the site to reduce the effects of erosion on crop fields. When final reclamation of the mine had taken place, there were no traces remaining that would indicate that the area affected at the Sky-Point mine was once a surface mine. This mine site is now producing a variety of crops, including hay, soybeans, and wheat.

Since the inception of the OSM awards, the accomplishments of the following Indiana operators have been recognized:

Year of Award	***Company***	***Mine***
1988	Black Beauty Coal Company	Arlen
1989	Vigo Coal Company	Discovery
1990	Solar Sources	Skypoint
1990	Fowler Excavating	Bullock
1991	Foertsch Construction	Little Sandy
1992	Solar Sources	Pit 12
1997	Solar Sources	Pit 12 [1]
1999	Amax Coal Company	Ayrshire
2000	Black Beauty Coal Company	Columbia
2001	Triad Mining	Switz City
2001	Kindill Mining	Mine 2
2001	Black Beauty Coal Company[2]	Mines in Indiana and Illinois
2002	Solar Sources	Skypoint[3]

1 HALL OF FAME AWARD **2 DIRECTOR'S AWARD** **3 25th ANNIVERSARY GOLD AWARD**

V. Success in Achieving the Purposes of SMCRA as Determined by Measuring and Reporting End Results:

Performance standard based reviews, along with public participation evaluations provide the IFO with a broad picture of:

- The number and extent of observed off-site impacts;

- The number of acres that have been mined and reclaimed and which meet the bond release requirements for the various phases of reclamation; and,
- The effectiveness of customer service provided by the State.

Individual topic reports, available in the IFO, provide a detailed analysis and information concerning how the evaluations were conducted and how the conclusions were reached.

A. Off-Site Impacts:

OSM Directive REG-8 focuses oversight on the "on-the-ground" success of the State Programs. A joint State/OSM evaluation was conducted during the EY to determine the effectiveness of the State program in protecting the environment and public from off-site impacts resulting from surface coal mining and reclamation operations.

The numbers of off-site impacts observed by the IDOR during the evaluation year were few, and generally affected only to a minor degree, land and water resources.

The IFO inspected 48 mine units and found that 93.9% of them were free of off-site impacts. Data gathered from these inspections found a total of 42 violations and eleven off-site impacts. Of the 42 violations noted, 30 addressed on-the-ground concerns and 12 administrative violations. The State reported 19 off-site impacts during the EY. Based upon this reporting, 94.1% of mine sites remained free from off-site impacts during the evaluation year.

The IFO concludes that the insignificant numbers of identified on-the-ground impacts and violations substantiate that the State is administering a successful surface mining regulatory program. The IFO recommends that the State continue to ensure mining is being conducted in such a manner.

B. Reclamation Success:

Thousands of acres of land affected by surface coal mining are successfully reclaimed each year as noted in Table 5 of this report.

The IFO conducted site visits at 12 permanent program surface mines and evaluated 1,350.99 phase I acres, 735.0 phase II acres and 2,937.7 phase III acres that the IDOR subsequently released. The IFO agreed with the IDOR that these acres met the reclamation requirements to be eligible for release of bond. Therefore, the IFO concludes that the IDOR is ensuring successful reclamation on lands affected by surface coal mining operations.

Specifically, the following elements were evaluated for successful reclamation:

Land Form/Approximate Original Contour and Soil Replacement

The criterion for determining whether reclaimed lands are reconstructed appropriately is whether it has been returned to its approximate original contour (AOC), including soil replacement. For the purposes of this evaluation Phase I bond releases were used as the indicator that the AOC had been achieved and soils had been replaced. For the evaluation period the approximate premining contour and soil replacement were achieved on 5,004 acres. To date approximately 88,188 acres have met the criteria for, and have been granted, Phase I bond release.

Surface Stability and Establishment of Vegetation

For the purposes of this evaluation, surface stability and the establishment of vegetation were measured by the acres of Phase II bond released. For EY 2002, Indiana was successful in achieving surface stability and in establishing vegetation on 5,887 acres.

Based on the IFO analysis of data supplied by the IDOR, between 1983 and September 2002, approximately 78,628 acres of mined land have met the criteria for Phase II bond release.

Establishment of Post Mining Land Use and Productivity Restoration

Achieved post mining land use through the establishment of a successful and appropriate vegetative cover, including restoration of productivity (where appropriate), were measured by the number of acres that received Phase III bond release. For the evaluation period, 8,408 acres had Phase III bond released.

Based upon the IFO analysis of data supplied by the IDOR, between 1983 and September 2002, 54,789 acres have been fully reclaimed and the post mining land use and appropriate vegetative cover achieved, including restoration of productivity where appropriate.

Hydrologic Reclamation

The successful restoration of surface and groundwater quality and quantity was measured by the accounting of acres of Phase III bond release achieved. Indiana released 8,408 acres for Phase III during the evaluation period and a total of 54,789 acres since 1983.

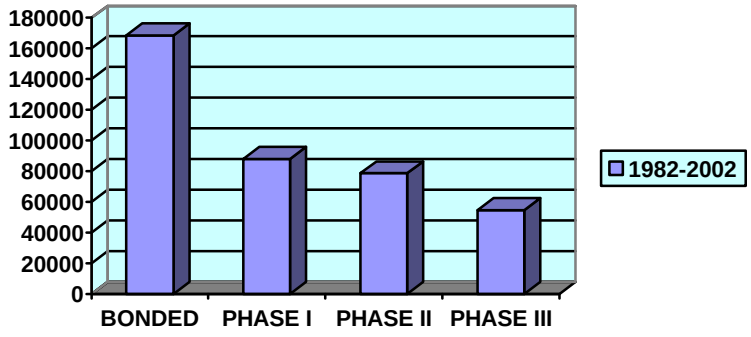
Contemporaneous Reclamation

The OSM Directive, REG-8 defines contemporaneous reclamation to be the difference in time between when lands are disturbed and when they

achieve phased bond release. There has been considerable discussion about whether this is a valid measure of contemporaneous reclamation. This discussion has taken place both within OSM and with the various State Regulatory Authorities. The results shown in the chart and tables below represent the best effort under REG-8 at assessing contemporaneous reclamation.

YEAR	BONDED	PHASE I	PHASE II	PHASE III
1983	3831	0	0	0
1984	42022	178	0	0
1985	18698	461	0	0
1986	7481	3069	0	0
1987	7463	5147	3708	0
1988	4815	4789	3365	0
1989	6544	5151	5769	0
1990	7501	2966	2549	0
1991	5219	3250	2006	459
1992	4335	4908	2898	298
1993	4292	2481	1915	1619
1994	3833	3148	4095	3112
1995	7150	5172	2778	2636
1996	2451	4548	3777	3517
1997	7981	7734	4814	3725
1998	14107	8549	8080	5500
1999	4780	4403	6110	7706
2000	5616	9914	6491	6544
2001	4566	7316	14386	11268
2002	6102	5004	5887	8408
TOTAL	168707*	88188	78628	54789

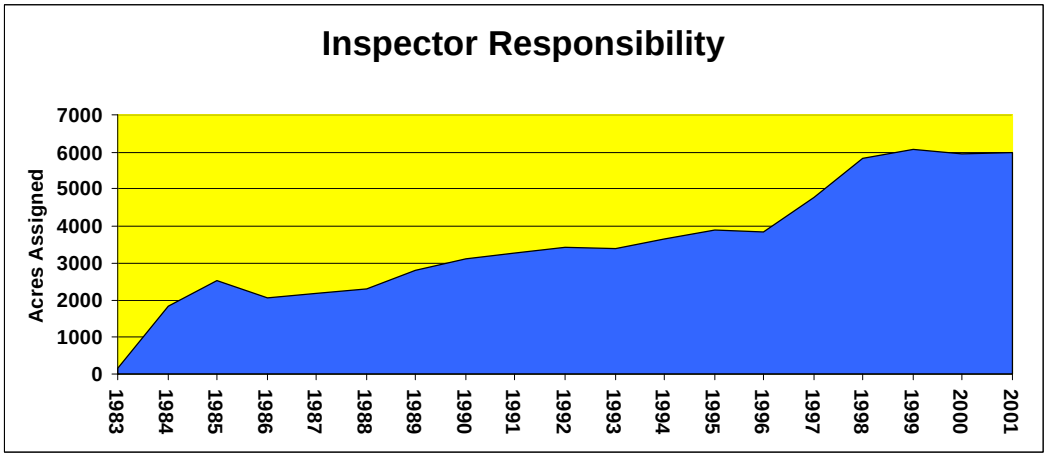
*THIS NUMBER DOES NOT REFLECT THE REMOVAL OF ACREAGE RELEASED AS NOT AFFECTED, NOR THE ACRES REPERMITTED AND BONDED. THE ACTUAL FINAL BONDED ACREAGE CAN BE SIGNIFICANTLY SMALLER THAN THIS.



A general picture of how successfully reclamation is staying current with mining was made by the IFO by comparing the numbers of acres affected

to the number of acres on which phase III bond were released by the IDOR from November 1, 2000, to October 31, 2001. For measurement of contemporaneous reclamation the IDOR provided data to the IFO showing 4,559.9 acres were affected and 9,950.9 acres were phase III released during the period November 1, 2000, to October 31, 2001. More than twice as many acres were released as were affected during this period which may be an indication of contemporaneous reclamation. Findings that no violations of the requirement for contemporaneous reclamation existed during IFO complete mine site evaluations in Indiana during EY2002 is a more accurate indicator that reclamation is staying current with mining.

The increasing bonded acreage inventory had added substantially to the administrative costs of the regulatory authority. Because operators are obtaining final bond release at a faster rate, the inventory of bonded acreage has diminished slightly. This has allowed the IDOR to adjust staffing levels to provide improved customer service. The average number of acres assigned to inspectors has continued to increase, but seems to have stabilized since 2000.



C. Customer Service

The IDOR held its 2001 Minerals Education Workshop on November 2-3, 2001, at Rose-Hulman Institute of Technology in Terre Haute, IN. This was the second annual workshop sponsored by the IDOR. Geared for teachers from kindergarten through middle school, this workshop provides the opportunity to learn about many aspects of mining, electricity, and information on minerals and their impacts on our daily lives. The first day was devoted to hands-on activities that the teacher can use immediately in the classroom. IDOR staff, a guest from the Illinois Department of Mines and Minerals, and a retired State Geologist of Missouri, taught the sessions. Information was compiled into a teacher's manual of lesson plans for all age groups. Each teacher received a large tote bag containing many different teaching aids such as rock and mineral kits, hardness kits,

posters, handouts, and videotapes donated by various organizations. A tour of a local coal mine was given on the second day of the workshop.

VI. OSM Assistance

The primary mode of OSM assistance to Indiana is through grant funding. Table 9 indicates the amount of grant funding to Indiana for operation of the regulatory program. OSM provides 50% of the funding necessary for the regulatory program and 100% of funding necessary for the Abandoned Mine Land Program in Indiana.

Additionally, assistance is provided as outlined below:

- Technical training courses are offered by OSM throughout the year, which address technical and programmatic aspects of mining and reclamation. These courses are provided for OSM and State participants as well as industry and others on a space available basis.

- OSM began working with the IDOR and the U.S. Fish and Wildlife Service on developing a set of mining related guidelines for protection of Indiana bats on areas proposed for mining in Indiana. Draft guidelines were developed early in the year and a meeting was held in June to further refine the guidelines. The project will continue into 2003.

- OSM provides the Technical Information Processing System including local workstations and software for State use. The OSM also provides training and support. Indiana uses the system for a variety of tasks related to permit application processing and other technical or engineering evaluations. The technical staff continues to work with the State to develop and implement an electronic permitting program.

- Informal discussions occur between OSM and State management and staff that result in a good working relationship. Informal assistance is provided regarding field or implementation issues on a continual basis.

- The Director of the IFO sits on the Board of the Indiana Society for Mining and Reclamation. This is a diverse group that includes membership from OSM, the IDOR, Department of Commerce, citizens, industry, academia and power industries. The group's focus is to identify topics of interest and to sponsor a Technology Transfer Seminar each year. The Technology Transfer Seminar is well advertised and attended by participants from all factions of the public and private sectors.

- The IFO has participated with Indiana on a Prime Farmland Team that is focused on addressing the technical aspects of prime farmland restoration.

- The IFO works closely with the Steering Committee for the Improvement of the

South Fork of the Patoka River. This group functions and is partially funded through the Appalachian Clean Streams Initiative. OSM assisted Indiana and the Patoka South Fork Watershed Steering Committee (PSFWSC) with map preparation, scanning, geo-referencing and geographical information system (GIS) work on the Augusta Lake project. The mapping project was completed in December 2001, and provided to the PSFWSC in 2002.

- OSM has a member on the IDOR AML Subsidence Team, which was formed during 1999 and continues today. The focus of the team is to evaluate Indiana's success in preventing AML coal mine subsidence in Indiana, instead of merely reacting to subsidence events through the AML Emergency Program. In EY 2002, the team solicited proposals for the Loge School Subsidence Instrumentation Project, located in Boonville, Indiana, and worked with the Indiana Geological Survey to develop a GIS for use in prioritizing subsidence risk over abandoned underground mines. The project will continue into EY 2003.

VII. General Oversight Topic Reviews

In addition to the off-site impact and land restoration reviews, OSM conducted oversight activities in the program areas listed below. Copies of oversight documents relating to these topics may be obtained at the IFO office or by requesting specific reports by mail at the following address:

Office of Surface Mining Reclamation and Enforcement
Indianapolis Field Office
575 North Pennsylvania, Room 301
Indianapolis, Indiana 46204

The IFO can also be contacted by E-mail at IFOMAIL@osmre.gov.

Complete Inspections: The workplan in this area was designed to allow the IFO to gather information, which would then be used to generate an overview of the "on-the-ground" impacts of surface coal mining and reclamation. A sample of 50 complete inspections was targeted with 46 of them being completed during the review year. As indicated in the off-site impact section above, the inspections indicated that Indiana maintains and administers an effective program that meets all SMCRA requirements.

Ground Water Monitoring Review Follow-Up: During EY 2000, a joint IDOR and IFO team was formed. The team's tasks were the development of systems and procedures to be used by the IDOR inspectors to assure the timely collecting, reporting and review of ground water monitoring information necessary for informed decision making and development, use, and maintenance of a ground water database. As a result of this effort, the team made six recommendations intended to improve the IDOR's ability to ensure that ground water monitoring and the review of ground water monitoring information are being conducted as necessary. During EY 2001 the IFO conducted a review to determine what progress the IDOR had made towards implementation of the

team recommendations. During EY 2002 the IFO continued the follow-up and identified six remaining tasks needed to complete the implementation of the team recommendations.

As required by the review workplan, the IDOR provided the IFO with a letter describing the progress in completing the team's recommendations. The actions taken to complete the recommendations include:

- Entered the backlog of ground water monitoring data gathered.
- Identified and corrected or removed errors and duplications in the ground water monitoring database.
- Completed inventories of surface water and ground water monitoring requirements for each permit.
- Inspection staff have received some training on the use of the ground water monitoring database. They have not been trained on how to apply the database to specific job functions.
- Hydrogeology staff continues to discuss with permittees ways in which to reduce the numbers of different ground water monitoring plans.
- Efforts are continuing to obtain copies of ground water monitoring data not previously provided to the IDOR, such as electronic submittal of data.

The IDOR has expended considerable effort to implement the team recommendations and continues to make progress. Upon completion and implementation of the team recommendations, the IFO believes the IDOR ground water monitoring program will be a model that other states can follow to ensure ground water monitoring is conducted in such a way to ensure that ground water is protected. The IFO recommends that the IDOR continue efforts to complete all of the team's recommendations and keep the IFO informed of progress it is making.

Army Corps of Engineers Jurisdictional Wetlands: A study was conducted to identify what the IDOR responsibilities should be, if any, pertaining to the mitigation of Corps of Engineers (CoE) jurisdictional wetlands and streams on areas affected by surface coal mining and reclamation operations.

The IDOR requires that permittees obtain appropriate authorization from the CoE for jurisdictional wetlands and streams prior to mining those areas and that CoE wetland and stream mitigation plans be submitted to the IDOR for acceptance under the mining permit. While the CoE does not expect the IDOR to enforce its permits, the CoE hopes sharing information and coordinating efforts will result in compliance with CoE permit requirements and reduce duplication of efforts at the mines by the two agencies.

A field review found that there are relatively few CoE jurisdictional wetlands and streams affected by coal mines in Indiana. The limited field visits conducted indicate the permittees are restoring those wetlands and streams as described in the CoE approved mitigation plans. It appears the permittees are reclaiming the wetlands and streams according to the CoE plans without being reminded to do so by the IDOR or the CoE.

Because the CoE does not expect the IDOR to enforce the CoE permitting requirements and the permittees are already reclaiming the wetlands and streams according to CoE plans, it was determined that the IDOR does not have any further responsibilities in this area. The Team did offer a number of recommendations to the IDOR that would enhance their program in this area.

AML Customer Service Review: An Enhancement and Performance Review of the customer service element of the Indiana AML program was conducted. The purpose of this evaluation was to determine how well satisfied landowners are with reclamation work done on their property.

Conclusions drawn from this review are as follows:

(1) The survey results indicate that the Indiana AML Program is very successfully performing AML reclamation and that landowners continue to be satisfied with the work performed.

(2) The small amount of negative feedback from the survey did not provide information or comments useful for program improvement.

Clean Streams Audit: In EY 2002, the Indianapolis Field Office and the OSM Mid-Continent Regional Coordinating Center (MCRCC) reviewed the Indiana AML Program Clean Streams grants to ascertain whether or not the projects completed with Clean Streams funds were appropriate and if the financial aspects of the handling of the Clean Streams grants are in compliance with the Federal Assistance Manual.

The review concentrated on project selection, compliance with any required program guidance, and the appropriateness of the expenditures of the Clean Streams Program from Grant Year 1997 to the present.

The MCRCC obtained and reviewed Field Office records of Authorizations to Proceed (ATP) and the Problem Area Description (PAD) from the Abandoned Mine Land Inventory System for each of the listed projects. This information was then compared with the contents of the State's project files at the Jasonville, Indiana office. State personnel were interviewed to determine how the State selects projects for Clean Streams funding and to gain an understanding of how Indiana's Clean Streams program is administered.

Joint site visits with State personnel were conducted at some Clean Streams sites for which the State had received ATP's in order to verify potential for acid mine drainage. Time constraints prevented visits to all the sites.

The MCRCC Grants staff secured pertinent information for the Clean Streams expenditures identified in grant applications, closeouts, or semi-annual reports for each of the grant years, 1997 –2002.

The review resulted in the following findings.

(1) An Authorization to Proceed was issued for every Clean Streams project where reclamation activity occurred.

(2) PADs for all except one Clean Streams site documented acid mine drainage (AMD) as an issue. A file review and site visit confirmed that potential for AMD existed at this site.

(3) All Clean Streams expenditures were found to be allowable costs.

(4) IDOR had no expenditures from Clean Streams funds for projects that were not on the provided list of Clean Streams projects.

(5) Although IDOR's process for selecting Clean Streams projects is different than for regular AML projects, it follows OSM's intended purposes for Clean Streams expenditures. OSM allows the states maximum flexibility in choosing Clean Streams projects, and Indiana is properly exercising its discretion with the projects it funds.

E-Grant Review: A grant review was conducted to determine if the IDOR documents electronic grant actions and retains documents with original signatures. The OSM e-grants initiative allows grantees to transfer grant actions electronically while maintaining a signed document (original) in their file. IDOR has submitted many grant documents electronically. The files did contain the required documents with original signatures and supporting documentation.

Sub-Grantee Property Inventory: A grant review of the IDOR was conducted at the office of the Indiana Geological Survey (IGS) in Bloomington, Indiana. The purpose for the review was to determine if the grantee reconciles property records of the sub-grantee at least every two years. It was found that all property purchased for the sub-grantee, over the years, was accounted for except one item. There were items on the inventory listing that have been stolen, damaged and no longer in service. Because of age and value reduction, some items could be permanently removed from the inventory listing and permanently transferred to the sub-grantee.

It is recommended that after the missing item is accounted for, the sub-grantee, IGS, should inform the grantee, IDOR, of the items that should be removed from the inventory listing. The grantee will request disposition instructions from OSM. Reconciliation of sub-grantee property records should be done every two years.

AML Tree Planting Evaluation: An Enhancement and Performance Review of Indiana's AML tree/shrub planting program was conducted at the State's request. The purpose of the evaluation was to provide an objective, quantitative and qualitative

assessment early in the tree planting effort, which may assist in reclamation decision-making.

The IFO evaluated five tree planting sites and concluded that the Indiana AML tree/shrub planting program was successful in achieving site stability. Tree survival at three of the five sites was very good, and was acceptable at the other two sites.

The IFO recommends that further weed control efforts be made and that landowners be encouraged to apply good management practices to the trees planted on their property. The IFO also recommends continued evaluation and follow-up studies on these tree-planting sites.

APPENDIX A:

These tables present data pertinent to mining operations and State and Federal regulatory activities within Indiana. They also summarize funding provided by OSM and Indiana staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the same as the evaluation year. Additional data used by OSM in its evaluation of Indiana's performance is available for review in the evaluation files maintained by the Indianapolis OSM Office.

APPENDIX B

This Appendix contains the Indiana Department of Natural Resources, Division of Reclamation comments on the draft Evaluation Report received by the IFO on November 21, 2002. A photocopy of the State's comment letter follows this page.

Presented below is the Field Office Director's disposition of the State's comments.

Disposition of Comments:

The three minor editorial comments offered by the State were incorporated into the final report. Additional information for Table 3 was also included in the final report.